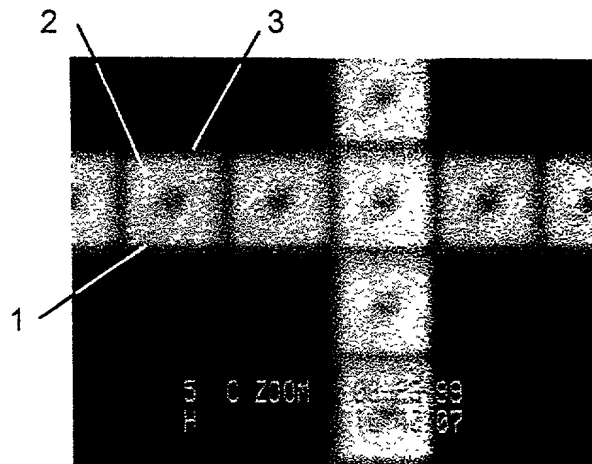


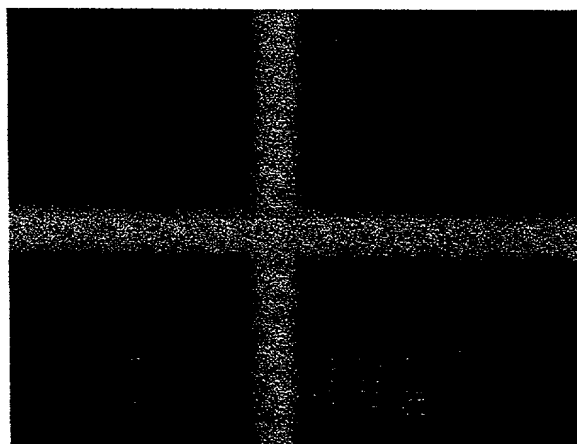
Fig. 1a



Typical Out-of-Convergence Image

Fig. 1b

(prior art)



Typical Out-of-Focus Image

Fig. 2

(prior art)

10054063.1-1304

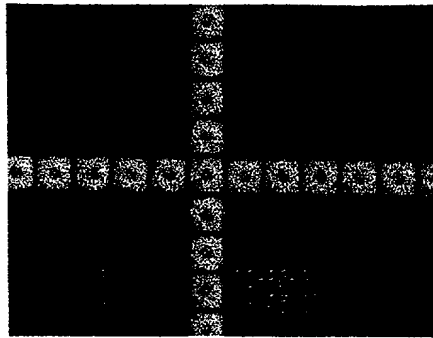


Fig. 3 (prior art)

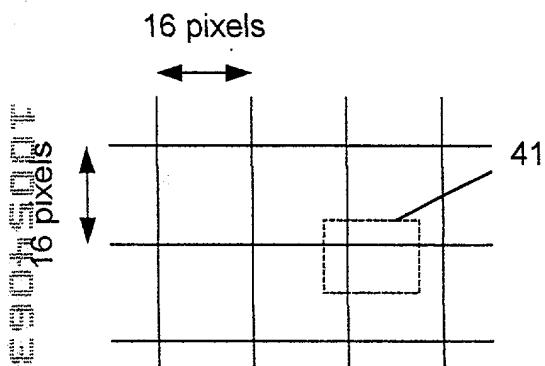


Fig. 4a

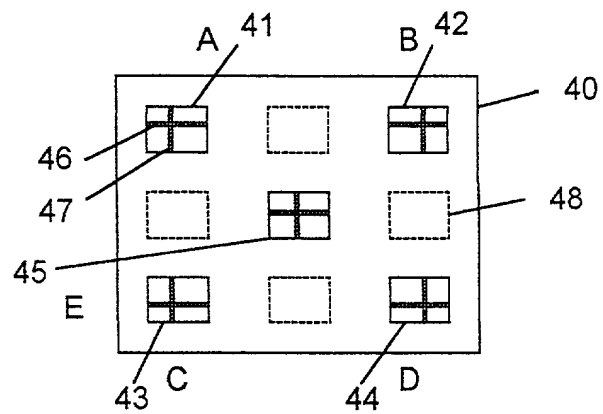


Fig. 4b

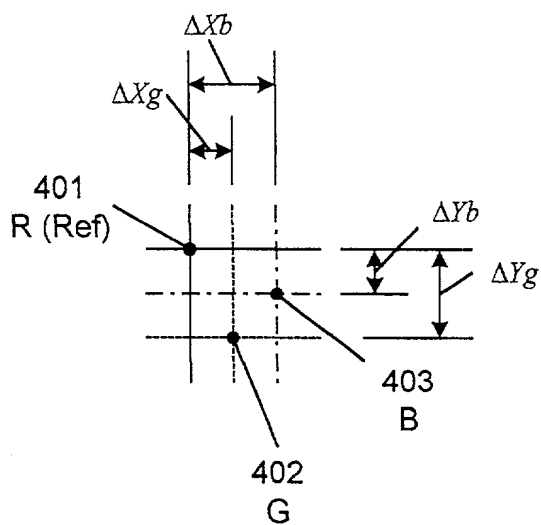


Fig. 4c

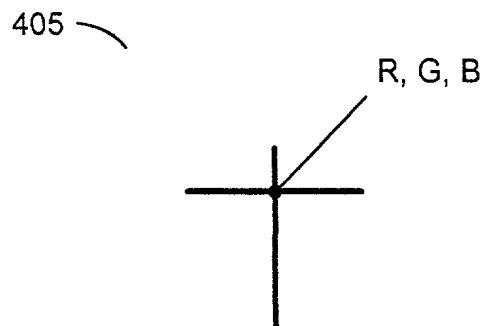


Fig. 4d

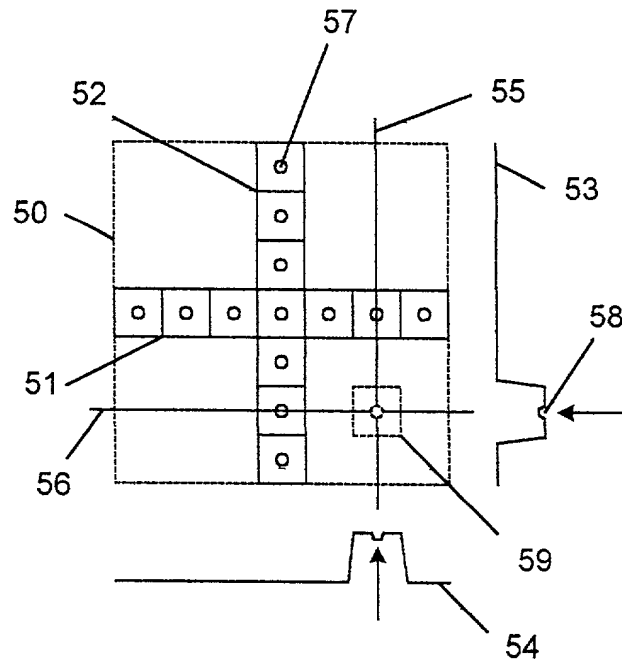


Fig. 5

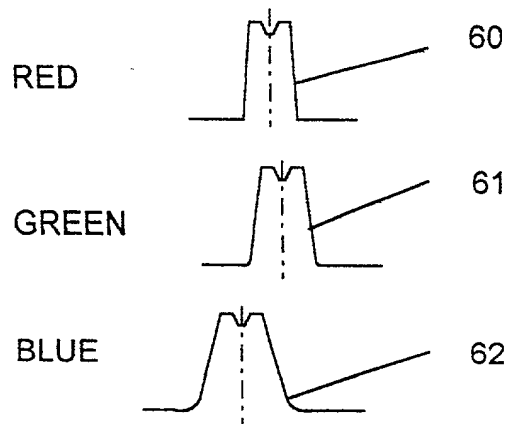


Fig. 6

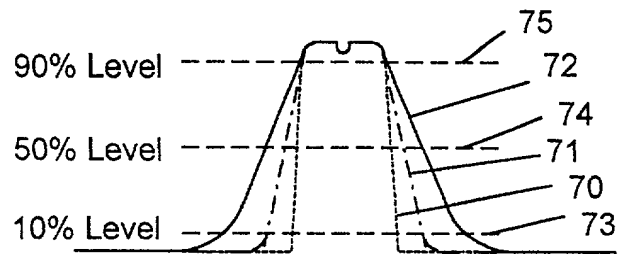


Fig. 7

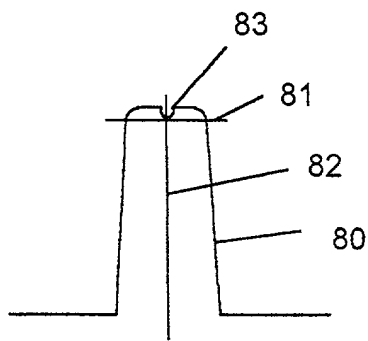


Fig. 8a

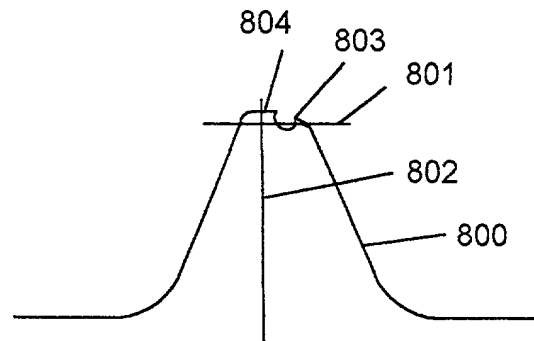


Fig. 8b

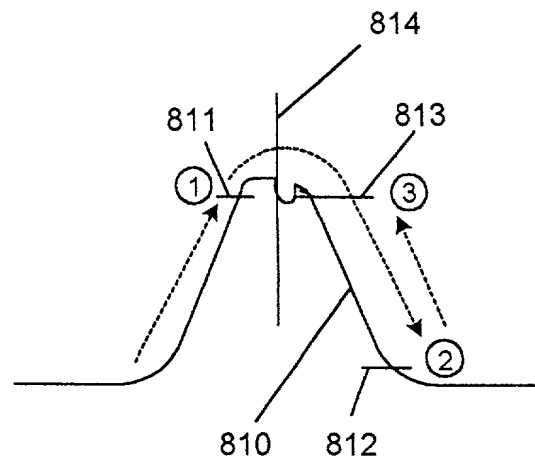


Fig. 8c

FIG. 9a

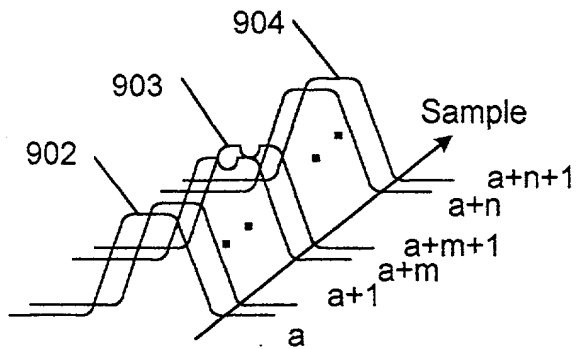


Fig. 9a

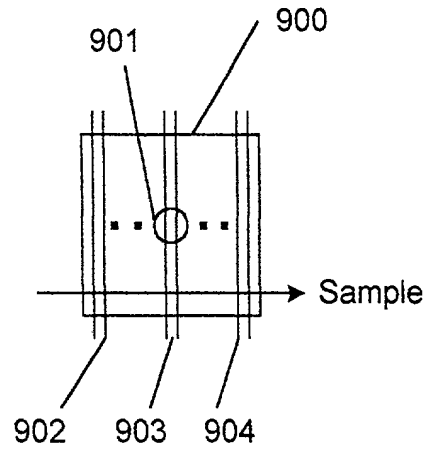


Fig. 9b

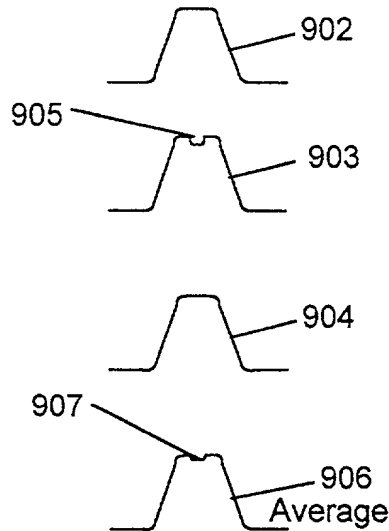


Fig. 9c

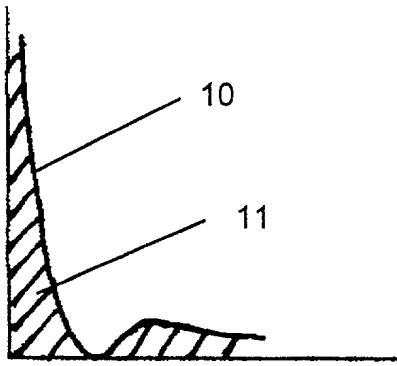


Fig. 10a

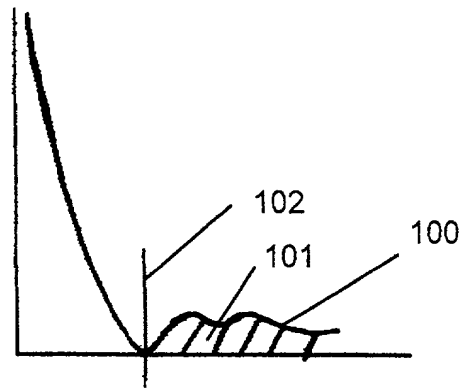
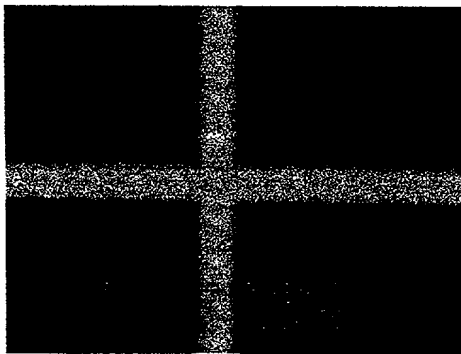
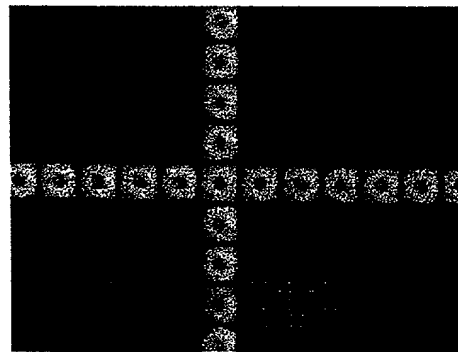


Fig. 10b



Out-of-Focus



In-Focus

Fig. 11a

Fig. 11b

FIG. 12

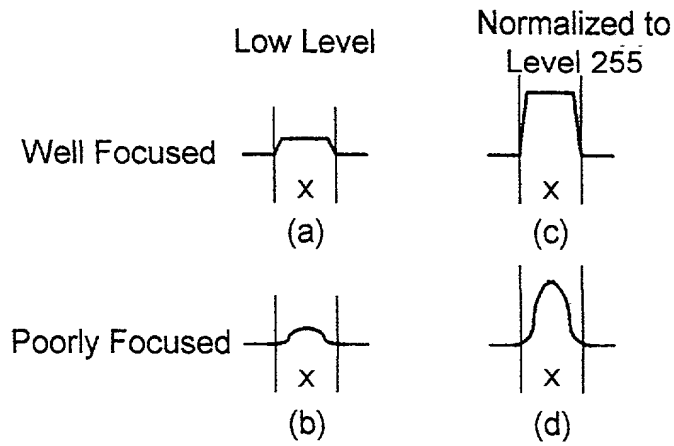


Fig. 12

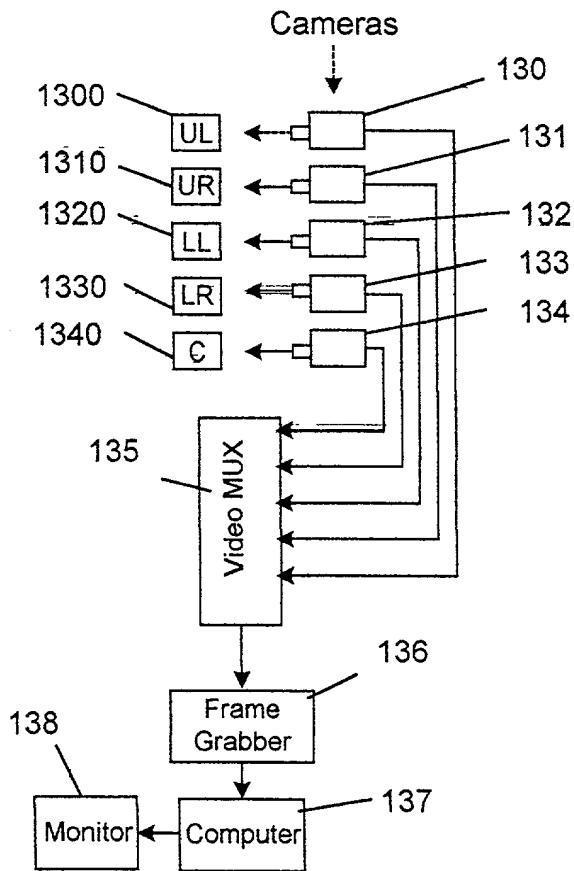


Fig. 13a

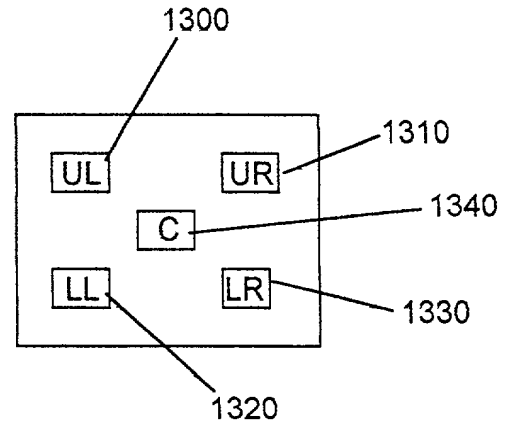


Fig. 13b

Fig. 14

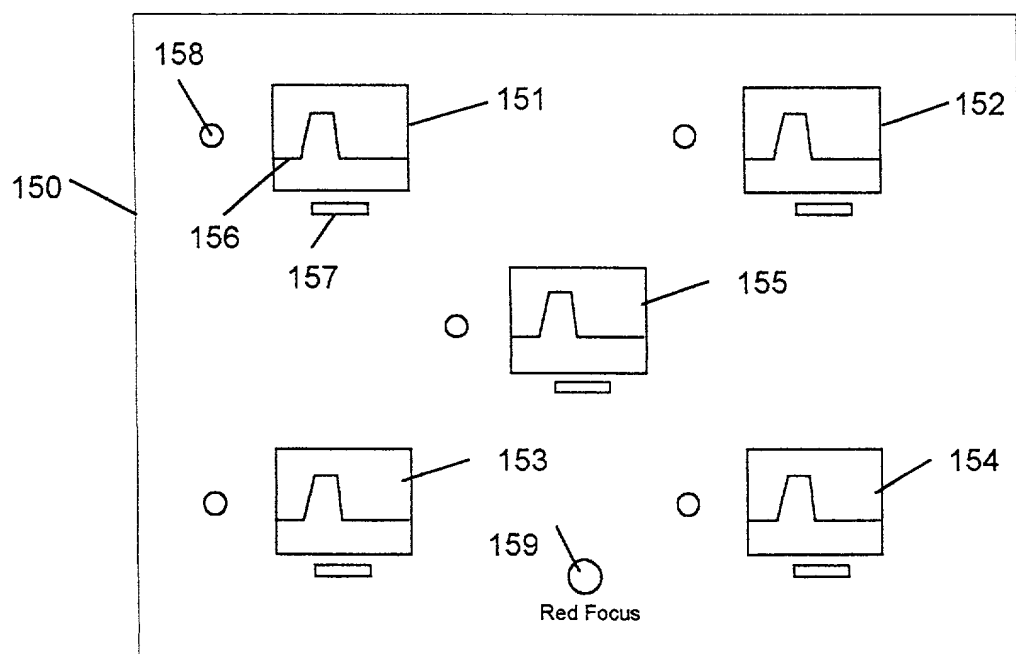


Fig. 15

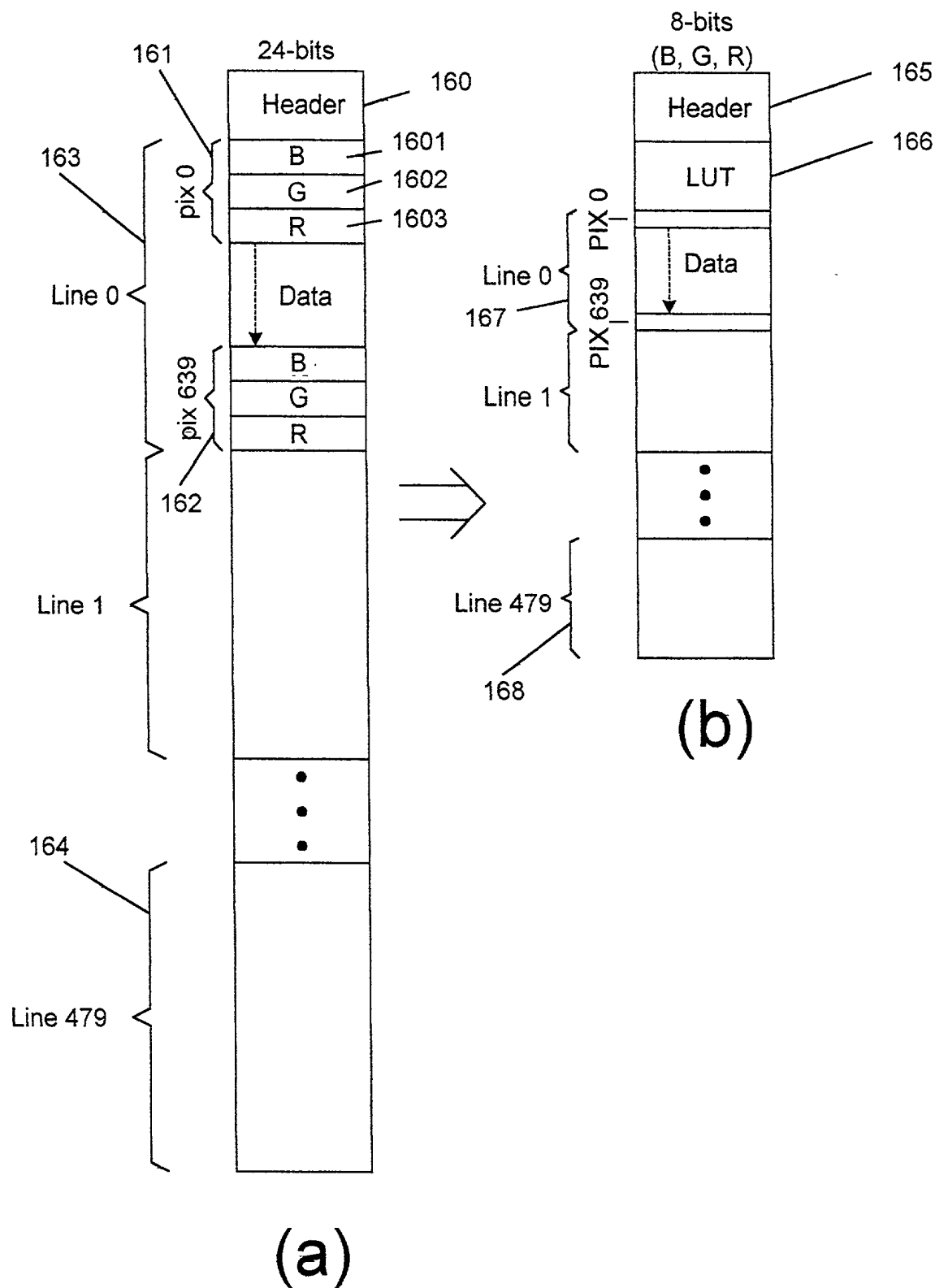


Fig. 16

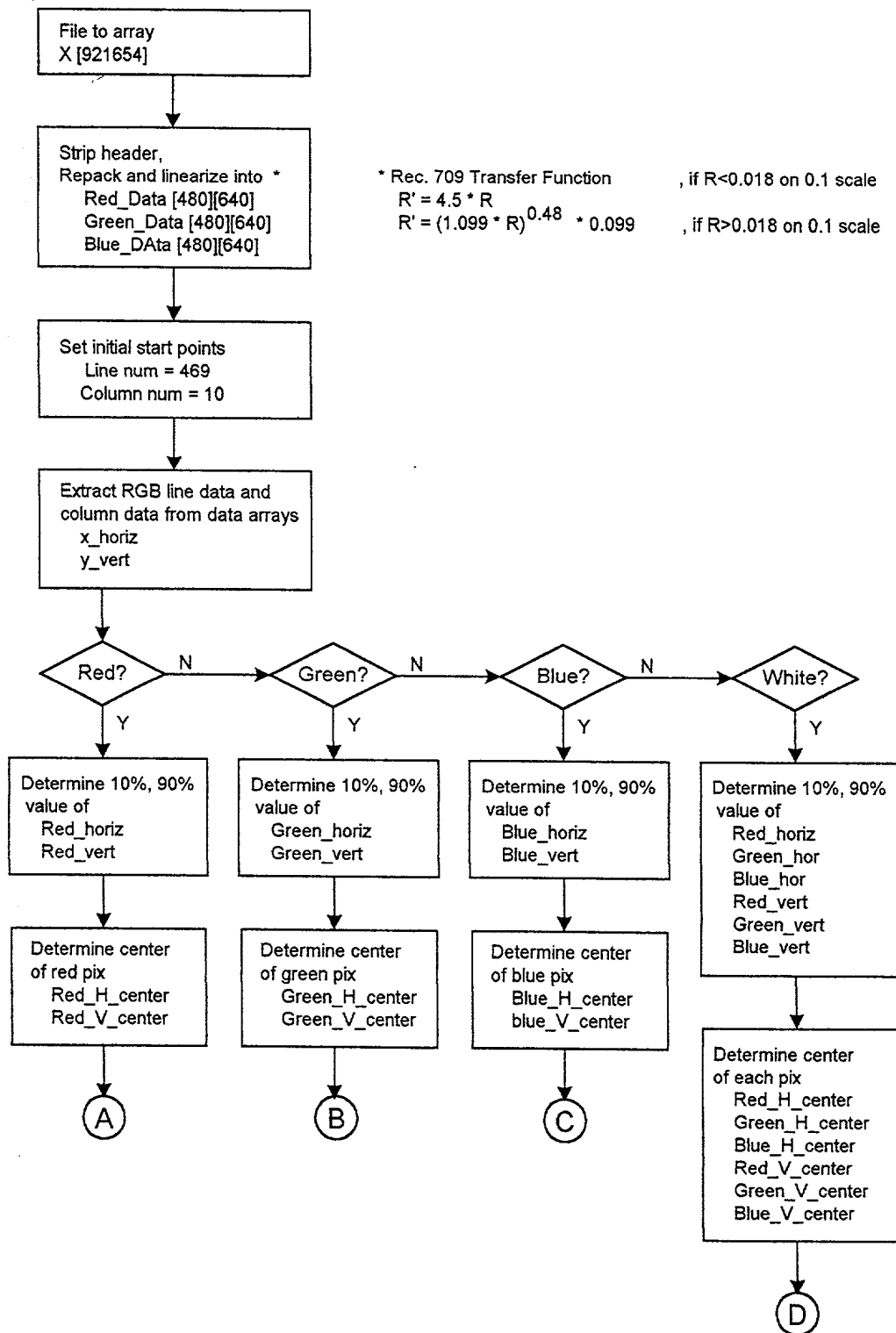


FIG. 17 a

(A)

(Same for green and blue arrays)

Establish upper and lower limits for averaging
Linum_upper, Red_V_center + (0.25 * Red_V-width)
Linum_lower, Red_V_center - (0.25 * Red_V-width)
Colnum_upper, Red_H_center + (0.25 * Red_H-width)
Colnum_lower, Red_H_center - (0.25 * Red_H-width)

Init avg Red Line to zero

Avg waveform over half pix

Normalize max amplitude to 255

Perform moving avg of 10 samples
to reduce noise component

Set avg value to 127

Perform single-sided, scaled power
spectrum of waveform of ad Red Avg Line

$$\frac{\text{FFT}(x)\text{FFT}^*(x)}{n^2}$$

* complex conjugate
n number of points in array x

Determin Max-Min of resulting avg

Find first minima of array

(F)

FIG. 17b

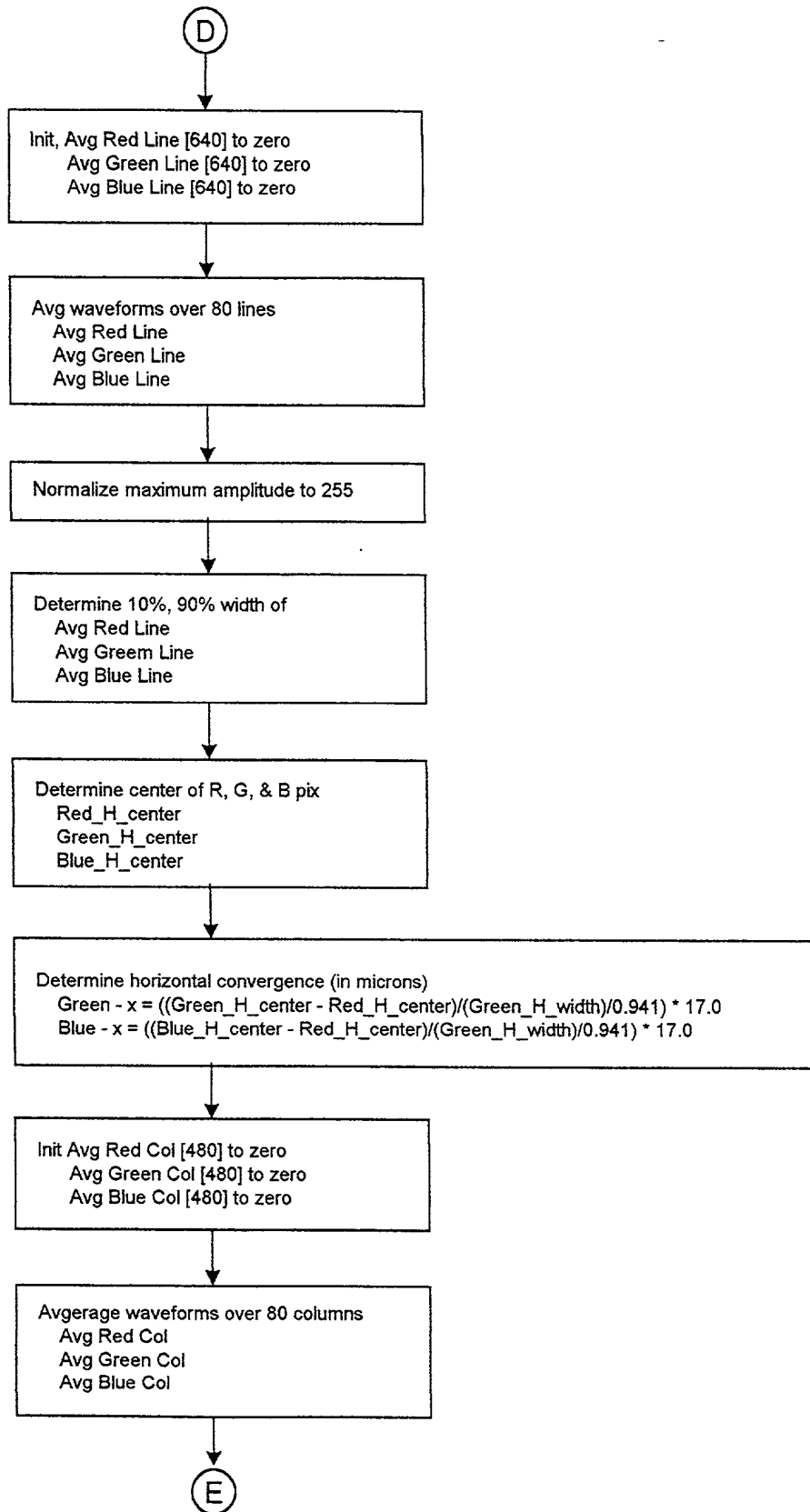


FIG. 17C

1003406-1003406

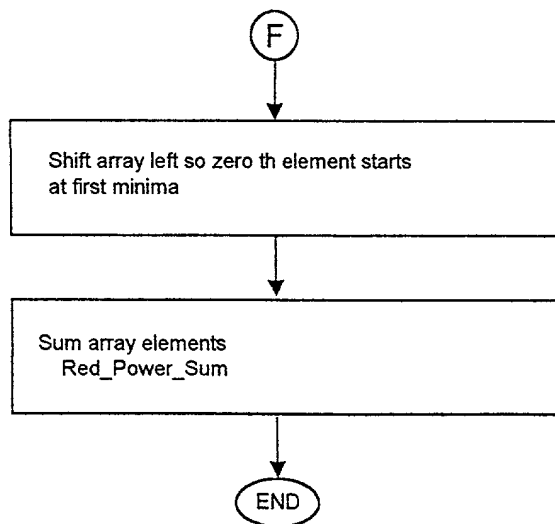
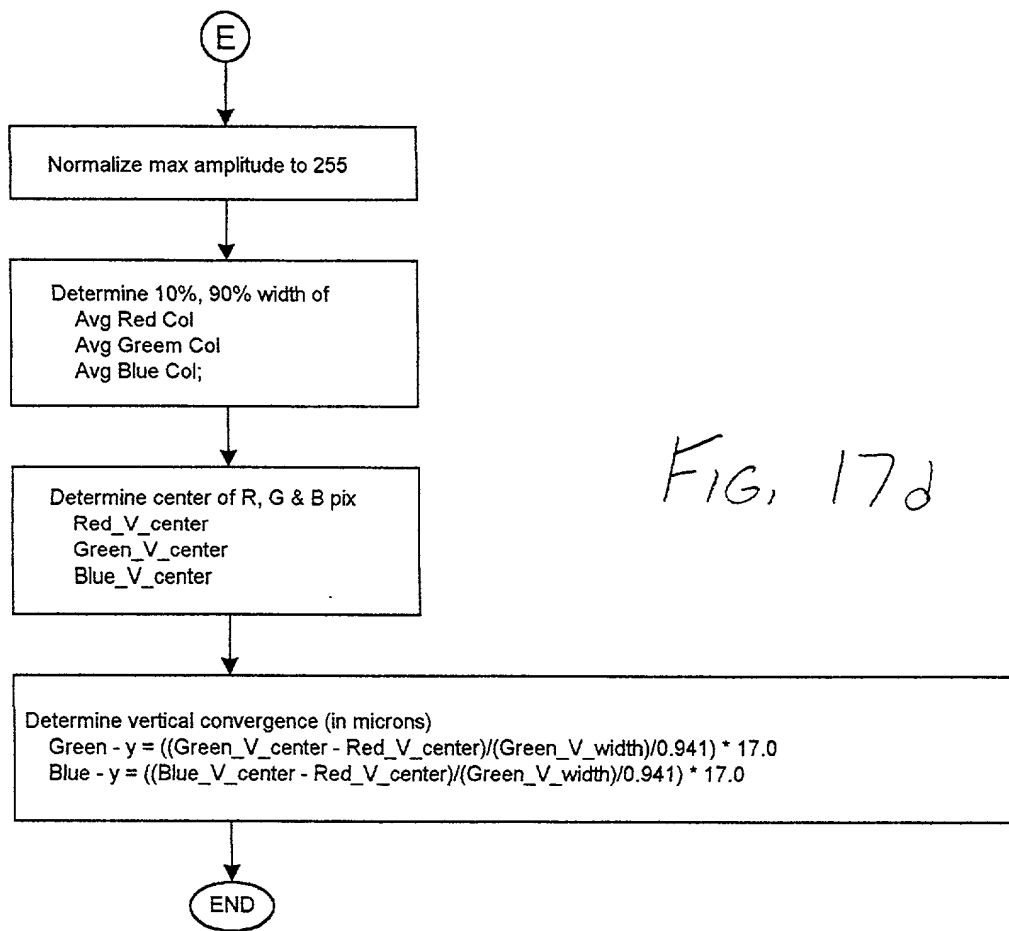


FIG. 17e